

**INITIAL EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
OFFICE OF THE STATE FIRE MARSHAL

REGARDING PROPOSED CHANGES TO
2016 CALIFORNIA BUILDING CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2**

The Office of the State Fire Marshal (OSFM) proposes to make necessary changes to the 2016 edition of the California Building Code (CBC), based on the 2015 International Building Code (IBC) model code. The OSFM further proposes to:

- Adopt necessary amendments to the model code;
- Repeal amendments to the model code that are no longer necessary.

LEGEND FOR EXPRESS TERMS

1. Existing California amendments or code language being modified are in italics when they appear in the model code text: All such language appears in *italics*, modified language is underlined.
2. New California amendments: All such language appears underlined and in italics.
3. Repealed text: All such language appears in ~~strikeout~~.

[Item 1. Photovoltaic systems clarification and editorial modifications.]

3111.2 Access and pathways. Roof access, pathways, and spacing requirements shall be provided in accordance with Sections 605.11.1 through 605.11.1.3.3. Pathways shall be over areas capable of supporting fire fighters accessing the roof. Pathways shall be located in areas with minimal obstructions such as vent pipes, conduit, or mechanical equipment.

Exceptions:

1. Detached, nonhabitable Group U structures including, but not limited to, detached garages serving Group R-3 buildings, parking shade structures, carports, solar trellises and similar structures.
2. Roof access, pathways and spacing requirements need not be provided where the fire chief/fire code official has determined that rooftop operations will not be employed.

Delete without substitution:

~~**3111.2.1 Roof access points.** Roof access points shall be located in areas that do not require the placement of ground ladders over openings such as windows or doors, and located at~~

~~strong points of building construction in locations where the access point does not conflict with overhead obstructions such as tree limbs, wires or signs.~~

Revise as follows:

3111.2.2 Solar photovoltaic systems for Group R-3 buildings. Solar photovoltaic systems for Group R-3 buildings shall comply with Sections 605.11.1.2.1 through 605.11.1.2.5.

Exception: These requirements shall not apply to structures designed and constructed in accordance with the *California Residential Code*. **Exceptions:**

1. These requirements shall not apply to structures designed and constructed in accordance with the *California Residential Code*. 2. These requirements shall not apply to roofs with slopes of 2 units vertical in 12 units horizontal (2:12) or less.

Delete without substitution:

3111.2.2.1 Size of solar photovoltaic array. Each photovoltaic array shall be limited to 150 feet (45 720 mm) by 150 feet (45 720 mm). Multiple arrays shall be separated by a 3-foot-wide (914 mm) clear access pathway.

3111.2.2.2 Hip roof layouts. Panels and modules installed on Group R-3 buildings with hip roof layouts shall be located in a manner that provides a 3-foot-wide (914 mm) clear access pathway from the eave to the ridge on each roof slope where panels and modules are located. The access pathway shall be at a location on the building capable of supporting the fire fighters accessing the roof.

Exception: These requirements shall not apply to roofs with slopes of two units vertical in 12 units horizontal (2:12) or less.

3111.2.2.3 Single-ridge roofs. Panels and modules installed on Group R-3 buildings with a single ridge shall be located in a manner that provides two, 3-foot-wide (914 mm) access pathways from the eave to the ridge on each roof slope where panels and modules are located.

Exception: This requirement shall not apply to roofs with slopes of two units vertical in 12 units horizontal (2:12) or less.

3111.2.2.4 Roofs with hips and valleys. Panels and modules installed on Group R-3 buildings with roof hips and valleys shall not be located closer than 18 inches (457 mm) to a hip or a valley where panels/modules are to be placed on both sides of a hip or valley. Where panels are to be located on only one side of a hip or valley that is of equal length, the panels shall be permitted to be placed directly adjacent to the hip or valley.

Exception: These requirements shall not apply to roofs with slopes of two units vertical in 12 units horizontal (2:12) or less.

3111.2.2.5 Allowance for smoke ventilation operations. Panels and modules installed on Group R-3 buildings shall be located not less than 3 feet (914 mm) from the ridge in order to allow for fire department smoke ventilation operations.

~~**Exception:** Panels and modules shall be permitted to be located up to the roof ridge where an alternative ventilation method approved by the fire chief has been provided or where the fire chief has determined vertical ventilation techniques will not be employed.~~

[Item 2. Correlation of regulations regarding modifications for the use of Stand-alone Pump and Tanks in residential fire sprinklers in the California Residential Building Code.]

[Chapter 35 – Referenced Standards]

***NFPA 13D, Amended Sections as follows:**

Revise Section 6.2.2 to read as follows:

The following proposed code change would be reflected in the California Building Code (Chapter 35), California Residential Code (Chapter 44), and California Fire Code (Chapter 80), relating to the referenced standard NFPA 13D, 2016 Edition.

6.2.2 Where a *well, pump, tank or combination thereof* is the source of supply for a fire sprinkler system, the configuration for the system shall be one of the following:

~~(1) the~~The water supply shall serve both domestic and fire sprinkler systems, and the following shall be met

- ~~(4a)~~ A test connection shall be provided downstream of the pump that creates a flow of water equal to the smallest sprinkler on the system. The connection shall return water to the tank.
- ~~(2b)~~ Any disconnecting means for the pump shall be approved.
- ~~(3c)~~ A method for refilling the tank shall be piped to the tank.
- ~~(4d)~~ A method of seeing the water level in the tank shall be provided without having to open the tank.
- ~~(5e)~~ The pump shall not be permitted to sit directly on the floor.

2. A stand-alone tank is permitted if the following conditions are met:

- (a) The pump shall be connected to a 220 volt circuit breaker shared with a common house hold appliance (E.g. range, oven, dryer).
- (b) The pump shall be a stainless steel 240 volt pump.
- (c) A valve shall be provided to exercise the pump. The discharge of the exercise valve shall drain to the tank, and
- (d) A sign shall be provided stating "Valve must be opened monthly for 5 minutes."
- (e) A means for automatically refilling the tank level, so that the tank capacity will meet the required water supply duration in minutes shall be provided.
- (f) A test connection shall be provided downstream of the pump that creates a flow of water equal to the smallest sprinkler on the system. The connection shall return water to the tank.
- (g) Any disconnecting means for the pump shall be approved.
- (h) A method for refilling the tank shall be piped to the tank.
- (i) A method of seeing the water level in the tank shall be provided without having to open the tank.

(j) The pump shall not be permitted to sit directly on the floor.

Notation

Authority: Health and Safety Code Sections 13108, 13108.5, 13114, 13143, 13146, 13210, 13211, 18949.2

Reference(s): Health and Safety Code Sections 13143, 13195, 18949.2

[Item 3. Correlation of regulations for use of Stand-alone Pump and Tanks in residential fire sprinklers.]

[Chapter 44 – Referenced Standards]

Add new Section 6.2.4 to read as follows:

6.2.4 Where a water supply serves both domestic and fire sprinkler systems, 5 gpm (19 L/min) shall be added to the sprinkler system demand at the point where the systems are connected, to determine the size of common piping and the size of the total water supply requirements where no provision is made to prevent flow into the domestic water system upon operation of a sprinkler. For multipurpose piping systems, the 5 gpm (19 L/min) demand shall be added at the domestic connection nearest the design area. This demand may be split between two domestic connections at 2.5 gpm (10 L/min) each.

Notation

Authority: Health and Safety Code Sections 13108, 13108.5, 13114, 13143, 13146, 13210, 13211, 18949.2

Reference(s): Health and Safety Code Sections 13143, 13195, 18949.2

[Item 4. Skylights in Wildland-Urban Interface Areas clarification and modifications.]

**SECTION 708A
EXTERIOR WINDOWS, SKYLIGHTS AND DOORS**

708A.2 Exterior glazing. The following exterior glazing materials and/or assemblies shall comply with this section:

- 1. Exterior windows**
- 2. Exterior glazed doors**
- 3. Glazed openings within exterior doors**
- 4. Glazed openings within exterior garage doors**
- 5. Exterior structural glass veneer**
- 6. Skylights**

708A.2.1 Exterior windows, skylights and exterior glazed door assembly requirements. Exterior windows, skylights and exterior glazed door assemblies shall comply with one of the following requirements:

- 1. Be constructed of multipane glazing with a minimum of one pane meeting the requirements of Section 2406 Safety Glazing, or**
- 2. Be constructed of glass block units, or**
- 3. Have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 257, or**
- 4. Be tested to meet the performance requirements of SFM Standard 12-7A-2**

Notation

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13108, 13108.5, 13114, 13143, 13146, 18949.2

Reference(s): Health and Safety Code Sections 13143, 13195, 18949.2

[Item 5. Garage doors in Wildland-Urban Interface Areas Clarification and modifications.]

708A.4 Weather stripping. All exterior doors, including garage doors shall be provided with weather stripping to resist the intrusion of embers from entering through gaps between doors and door openings. Weather stripping or seals shall be installed on the bottom, sides, and tops of doors to reduce gaps between doors and door openings to 1/8-inch (3.2 mm) or less.

Notation

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13108, 13108.5, 13114, 13143, 13146, 18949.2

Reference(s): Health and Safety Code Sections 13143, 13195, 18949.2

[Item 6. Accessory Structures in Wildland-Urban Interface Areas Clarification and modifications.]

701A.3 Application. New buildings located in any Fire Hazard Severity Zone or any Wildland-Urban Interface Fire Area designated by the enforcing agency constructed after the application date shall comply with the provisions of this chapter.

Exceptions:

- 1. Buildings of an accessory character classified as a Group U occupancy and not exceeding 120 square feet in floor area, when located at least 30 feet from an applicable building.**
- 2. Buildings of an accessory character classified as Group U occupancy of any size located least 50 feet from an applicable building.**
- 3. Buildings classified as a Group U Agricultural Building, as defined in Section 202 of this code (see also Appendix C – Group U Agricultural Buildings), when located at least**

50 feet from an applicable building.

4. Additions to and remodels of buildings originally constructed prior to the applicable application date.

For the purposes of this section and 710A, applicable building includes all buildings that have residential, commercial, educational, institutional, or similar occupancy type use.

701A.3.2 Application to accessory buildings and miscellaneous structures.

New accessory buildings and miscellaneous structures specified in section 710A shall comply only with the requirements of that section.

~~710A.1 General. Accessory and miscellaneous structures, other than buildings covered by Section 701A.3, which pose a significant exterior exposure hazard to applicable buildings during wildfires shall be constructed to conform to the ignition resistance requirements of this section.~~ Accessory buildings and miscellaneous structures defined in this section that have the potential to pose a significant exterior fire exposure hazard to applicable buildings during wildfires shall be constructed to conform to the requirements of this section.

~~710A.2 Applicability. The provisions of this section shall apply to trellises, arbors, patio covers, carports, gazebos and similar structures of an accessory or miscellaneous character.~~ the buildings covered by Section 701A.3 Exception 1. This section shall also apply to specified attached and detached miscellaneous structures that require a building permit, including but not limited to; trellises, arbors, patio covers, carports, gazebos, and similar structures.

Exceptions.

1. Decks shall comply with the requirements of Section 709A.
2. Awnings and canopies shall comply with the requirements of Section 3105.
3. Exterior wall architectural trim, embellishments, and fascias.
4. Roof or wall top cornice projections and similar assemblies.

~~710A.3 Where required. Accessory structures shall comply with the requirements of this section.~~ No requirements shall apply to accessory buildings or miscellaneous structures when located at least 50 feet from an applicable building. Applicable accessory buildings and attached miscellaneous structures, or detached miscellaneous structures that are installed at a distance of less than 3 feet from an applicable building, shall comply with this section. When required by the enforcing agency, detached miscellaneous structures that are installed at a distance of more than 3 feet but less than 50 feet from an applicable building shall comply with the requirements of this section.

710A.3.1 Accessory building requirements. ~~Attached accessory structures shall~~

~~comply with the requirements of this section.~~ Applicable accessory buildings that are less than 120 square feet in floor area, and are located more than 30 feet but less than 50 feet from an applicable building shall be constructed of noncombustible materials or of ignition resistant materials as described in Section 704A.2.

710A.3.2 Attached miscellaneous structure requirements. Applicable miscellaneous structures that are attached to, or installed at a distance of less than 3 feet from, an applicable building shall be constructed of noncombustible materials or of ignition resistant materials as described in Section 704A.2.

710A.3.3 Detached miscellaneous structure requirements. When required by the enforcing agency, applicable detached miscellaneous structures that are installed at a distance of more than 3 feet but less than 50 feet from, an applicable building shall be constructed of noncombustible materials or of ignition resistant materials as described in Section 704A.2.

~~710A.4 Requirements. When required by the enforcing agency accessory structures shall be constructed of noncombustible or ignition-resistant materials.~~

Notation

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13108, 13108.5, 13114, 13143, 13146, 18949.2

Reference(s): Health and Safety Code Sections 13143, 13195, 18949.2

[Item 7. Referenced Standards in Wildland-Urban Interface Areas clarification and modifications.]

703A.5.2.1 Fire-retardant-treated wood. Fire-retardant-treated wood shall be tested in accordance with ASTM D2898 (Method A) ~~D-2898, "Standard Practice for Accelerated Weathering of Fire-Retardant Treated Wood for Fire Testing (Method A)"~~ and the requirements of Section 2303.2.

703A.7 Standards of quality. The State Fire Marshal standards for exterior wildfire exposure protection listed below and as referenced in this chapter are located in the California Referenced Standards Code, Part 12 and Chapter 35 of this code.

SFM Standard 12-7A-1, Exterior Wall Siding and Sheathing. A fire resistance test standard consisting of a 150 kW intensity direct flame exposure for a 10-minute duration.

SFM Standard 12-7A-2, Exterior Windows. A fire resistance test standard consisting of a 150 kW intensity direct flame exposure for an a 8-minute duration.

SFM Standard 12-7A-3, Horizontal Projection Underside A fire resistance test standard consisting of a 300 kW intensity direct flame exposure for a 10-minute duration.

SFM Standard 12-7A-4, Decking. A two-part test consisting of a heat release rate (Part A) deck assembly combustion test with an under deck exposure of 80 kW intensity direct flame for a 3-minute duration, and a (Part B) sustained deck assembly combustion test consisting of a deck upper surface burning ember exposure with a 12 mph wind for 40 minutes using a 2.2lb (1kg) burning "Class A" size 12"x12"x 2.25" (300 mm x 300 mm x 57 mm) roof test brand.

SFM Standard 12-7A-4A, Decking Alternate Method A. A heat release rate deck assembly combustion test with an under deck exposure of 80 kW intensity direct flame for a 3-minute duration.

SFM Standard 12-7A-5, Ignition-resistant Material. A generic building material surface burning flame spread test standard consisting of an extended 30 minute ASTM E84 or UL 723 test method as is used for fire-retardant-treated wood.

ASTM D2898 Standard Practice for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing

ASTM D3909/D3909M Standard Specification for Asphalt Roll Roofing (Glass Felt) Surfaced With Mineral Granules

ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials

ASTM E2632/E2632M Standard Test Method for Evaluating the Under-Deck Fire Test Response of Deck Materials

ASTM E2707 Standard Test Method for Determining Fire Penetration of Exterior Wall Assemblies Using a Direct Flame Impingement Exposure

ASTM E2726/E2726M Standard Test Method for Evaluating the Fire-Test-Response of Deck Structures to Burning Brands

ASTM E2886/E2886M Standard Test Method for Evaluating the Ability of Exterior Vents to Resist the Entry of Embers and Direct Flame Impingement

ASTM E2957 Standard Test Method for Resistance to Wildfire Penetration of Eaves, Soffits and Other Projections

NFPA 257 Standard on Fire Test for Window and Glass Block Assemblies

UL 723 Standard for Test for Surface Burning Characteristics of Building Materials

704A.2 Ignition-resistant materials. ~~Ignition-resistant materials shall be determined in accordance with~~ comply with one of the following:

- 1. The requirements in Section 704A.3 when tested in accordance with the test procedures set forth in ASTM E84 or UL 723,**
- 2. The test procedures and requirements set forth in SFM Standard 12-7A-5 "Ignition-Resistant Material", or**
- 3. One of the alternative methods in Section 704A.4, in accordance with this section.**

704A.3 Conditions of acceptance for ignition-resistant material tested in accordance with ASTM E84 or UL 723. A material shall comply with the conditions of acceptance in 1 and 2 below when the test is continued for an additional 20-minute period, meaning for a total test period of an "extended" 30-minutes. test period.

- 1. The material shall exhibit a flame spread index not exceeding 25 and shall show no evidence of progressive combustion following the extended 30-minute test period.**
- 2. The material shall exhibit a flame front that does not progress more than 10-1/2 feet (3200 mm) beyond the centerline of the burner at any time during the extended 30-minute test period.**

~~704A.3~~**704A.4 Alternative methods for determining ignition-resistant material.** Any one of the following shall be accepted as meeting the definition of ignition-resistant material:

- 1. Noncombustible material.** Material that complies with the definition for noncombustible materials in Section 202.
- 2. Fire-retardant-treated wood.** Fire-retardant-treated wood identified for exterior use that complies with the requirements of Section 2303.2.
- 3. Fire-retardant-treated wood shingles and shakes.** Fire-retardant-treated wood shingles and shakes, as defined in Section 1505.6 and listed by State Fire Marshal for use as "Class B" roof covering, shall be accepted as an ignition-resistant wall covering material when installed over solid sheathing.

705A.2 Roof coverings. Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to ~~prevent~~resist the intrusion of flames and embers, be fire stopped with approved materials or have one layer of minimum 72 pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909 ~~D-3909~~ installed over the combustible decking.

705A.3 Roof valleys. Where valley flashing is installed, the flashing shall be not less than 0.019-inch (0.48 mm) No. 26 gage galvanized sheet corrosion-resistant metal installed over not less than one layer of minimum 72 pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909 ~~D-3909~~, at least 36-inch-wide (914 mm) running the full length of the valley.

706A.2 Requirements. Ventilation openings for enclosed attics, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, and underfloor ventilation openings shall be fully covered with metal wire mesh, vents, other materials or other devices that meet one of the following requirements:

1. Vents shall be listed to ASTM E2886 and comply with all of the following: ~~Listed vents complying with ASTM E2886.~~

1.1 There shall be no flaming ignition of the cotton material during the Ember Intrusion Test ~~The Ember Intrusion Test shall have no flaming ignition of the cotton material.~~

1.2 There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.

1.3 The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).

2. Vents complying shall comply with all of the following.

2.1 The dimensions of the openings therein shall be a minimum of 1/16-inch (1.6 mm) and shall not exceed 1/8-inch (3.2 mm).

2.2 The materials used shall be noncombustible.

Exception: Vents located under the roof covering, along the ridge of roofs, with the exposed surface of the vent covered by noncombustible materials shall be permitted to be of combustible materials.

2.3 The materials used shall be corrosion resistant.

706A.3 Ventilation openings on the underside of eaves and cornices. Vents shall not be installed on the underside of eaves and cornices.

Exceptions:

1. Vents listed to ASTM E2886 and complying with all of the following ~~Listed vents complying with ASTM E2886.~~

1.1 There shall be no flaming ignition of the cotton material during the Ember Intrusion Test ~~The Ember Intrusion Test shall have no flaming ignition of the cotton material.~~

1.2 There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.

1.3 The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).

2. The enforcing agency ~~may~~shall be permitted to accept or approve special eave and cornice vents that resist the intrusion of flame and burning embers.

3. Vents complying with the requirements of Section 706A.2 ~~may~~shall be permitted to be installed on the underside of eaves and cornices in accordance with either one of the following conditions:

3.1 The attic space being ventilated is fully protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or,

3.2 The exterior wall covering and exposed underside of the eave are of noncombustible materials or of ignition-resistant materials, as determined in accordance with SFM Standard 12-7A-5 Ignition-Resistant Material the requirements of Section 704A.3, and the vent is located more than 12 feet (3.66 m) from the ground or walking surface of a deck, porch, patio or similar surface.

707A.3 Exterior walls. The exterior wall covering or wall assembly shall comply with one of the following requirements:

1. Noncombustible material

2. Ignition-resistant material

3. Heavy timber exterior wall assembly

4. Log wall construction assembly

5. Wall assemblies that ~~meet the performance criteria~~ have been tested in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in ASTM E2707 with the conditions of acceptance shown in Section 707A.3.1

6. Wall assemblies that meet the performance criteria in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in SFM Standard 12-7A-1.

Exception: Any of the following shall be deemed to meet the assembly performance criteria and intent of this section:

1. One layer of 5/8-inch Type X gypsum sheathing applied behind the exterior covering or cladding on the exterior side of the framing

2. The exterior portion of a 1-hour fire resistive exterior wall assembly designed for exterior fire exposure including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual

707A.3.1 Conditions of acceptance when tested in accordance with ASTM E2707.

The ASTM E2707 test shall be conducted on a minimum of three test specimens and the conditions of acceptance in 1 and 2 below shall be met. If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the conditions of acceptance.

- 1. Absence of flame penetration through the wall assembly at any time.**
- 2. Absence of evidence of glowing combustion on the interior surface of the assembly at the end of the 70-min test.**

~~707A.3.1~~ 707A.3.2 Extent of exterior wall covering. Exterior wall coverings shall extend from the top of the foundation to the roof, and terminate at 2 inch (50.8 mm) nominal solid wood blocking between rafters at all roof overhangs, or in the case of enclosed eaves, terminate at the enclosure.

707A.5 Enclosed roof eaves and roof eave soffits. The exposed underside of enclosed roof eaves having either a boxed-in roof eave soffit with a horizontal underside, or sloping rafter tails with an exterior covering applied to the underside of the rafter tails, shall be protected by one of the following:

- 1. Noncombustible material**
- 2. Ignition-resistant material**
- 3. One layer of $\frac{5}{8}$ -inch Type X gypsum sheathing applied behind an exterior covering on the underside of the rafter tails or soffit**
- 4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the rafter tails or soffit including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual**
- 5. Boxed-in roof eave soffit assemblies with a horizontal underside that meet the performance criteria in Section 707A.9 when tested in accordance with the test procedures set forth in ASTM E2957**
- 6. Boxed-in roof eave soffit assemblies with a horizontal underside that meet the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3**

Exceptions: The following materials do not require protection:

- 1. Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails**
- 2. Fascia and other architectural trim boards**

707A.6 Exterior porch ceilings. The exposed underside of exterior porch ceilings shall be protected by one of the following:

- 1. Noncombustible material**
- 2. Ignition-resistant material**
- 3. One layer of $\frac{5}{8}$ -inch Type X gypsum sheathing applied behind the exterior covering on the underside of the ceiling**
- 4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the ceiling assembly including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual**
- 5. Porch ceiling assemblies with a horizontal underside that meet the performance criteria in Section 707A.9 when tested in accordance with the test procedures set forth**

in ASTM E2957

6. Porch ceiling assemblies with a horizontal underside that meet the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3

Exception: Architectural trim boards.

707A.7 Floor projections. The exposed underside of a cantilevered floor projection where a floor assembly extends over an exterior wall shall be protected by one of the following:

1. Noncombustible material
2. Ignition-resistant material
3. One layer of $\frac{5}{8}$ -inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection
4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor projection including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual
5. The underside of a floor projection assembly that meet the performance criteria in Section 707A.9 when tested in accordance with the test procedures set forth in ASTM E2957
6. The underside of a floor projection assembly that meet the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3

Exception: Architectural trim boards.

707A.8 Underfloor protection. The underfloor area of elevated or overhanging buildings shall be enclosed to grade in accordance with the requirements of this chapter or the underside of the exposed underfloor shall consist of one of the following:

1. Noncombustible material
2. Ignition-resistant material
3. One layer of $\frac{5}{8}$ -inch Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection
4. The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the floor including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual
5. The underside of a floor assembly that meets the performance criteria in Section 707A.9 when tested in accordance with the test procedures set forth in ASTM E2957
6. The underside of a floor assembly that meets the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3

Exception: Heavy timber structural columns and beams do not require protection.

707A.9 Conditions of acceptance when tested in accordance with ASTM E2957.
The test shall be conducted on a minimum of three test specimens and the conditions

of acceptance in 1 through 3 below shall be met. If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the conditions of acceptance.

1. Absence of flame penetration of the eaves or horizontal projection assembly at any time.
2. Absence of structural failure of the eaves or horizontal projection subassembly at any time.
3. Absence of sustained combustion of any kind at the conclusion of the 40-minute test.

708A.2 Exterior glazing. The following exterior glazing materials and/or assemblies shall comply with this section:

1. Exterior windows
2. Exterior glazed doors
3. Glazed openings within exterior doors
4. Glazed openings within exterior garage doors
5. Exterior structural glass veneer
6. Vents

708A.3 Exterior doors. Exterior doors shall comply with one of the following:

1. The exterior surface or cladding shall be of noncombustible material
2. The exterior surface or cladding shall be of ignition-resistant material,~~or~~
- ~~3. The exterior door shall 2. Shall be constructed of solid core wood that complies with the following requirements:~~
 - ~~2-1. 3.1~~ Stiles and rails shall not be less than 13/8 inches thick.
 - ~~2-2. 3.2~~ Raised pPanels shall not be less than 1 1/4 inches thick, except for the exterior perimeter of the raised panel that ~~may~~shall be permitted to taper to a tongue not less than 3/8 inch thick.
- ~~3. Shall 4.~~ The exterior door assembly shall have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 252.
- ~~4. Shall 5.~~ The exterior surface or cladding shall be tested to meet the performance requirements of Section 707A.3.1 when tested in accordance with ASTM E2707.
6. The exterior surface or cladding shall be tested to meet the performance requirements of SFM Standard 12-7A-1.

709A.3 Decking Surfaces. The walking surface material of decks, porches, balconies and stairs shall be constructed with one of the following materials:

1. ~~Ignition-resistant material that~~ Material that complies with the performance requirements of Section 709A.4 when tested in accordance with both ASTM E2632 and ASTM E2726.
2. Ignition resistant material that complies with the performance requirements of 704A.3 when tested in accordance with ASTM E84 or UL 723.
3. Material that complies with the performance requirements of both SFM Standard 12-7A-4 and SFM Standard 12-7A-5.

2.4. Exterior fire retardant treated wood

3.5. Noncombustible material

4.6. Any material that complies with the performance requirements of SFM Standard 12-7A-4A when attached exterior wall covering is also either composed noncombustible or ignition-resistant material.

Exception: Wall material shall be permitted to be of any material that otherwise complies with this chapter when the decking surface material complies with the performance requirements ASTM E84 with a Class B flame spread index.

7. Any material that complies with the performance requirements of Section 709A.5 when tested in accordance with ASTM E2632 and when attached exterior wall covering is also composed of only noncombustible or ignition-resistant materials.

Exception: Wall material shall be permitted to be of any material that otherwise complies with this chapter when the decking surface material complies with the performance requirements ASTM E84 with a Class B flame spread index.

709A.4 Requirements for type of ignition-resistant material in Section 709A.3, item (1). The material shall be tested in accordance with both ASTM E2632 and ASTM E2726 and shall comply with the conditions of acceptance in 709A.4.1 and 709A.4.2. The material shall also be tested in accordance with ASTM E84 or UL 723 and comply with the performance requirements of Section 704A.3.

709A.4.1 Conditions of acceptance for ASTM E2632: The ASTM E2632 test shall be conducted on a minimum of three test specimens and the conditions of acceptance in 1 through 3 below shall be met. If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the conditions of acceptance.

- 1. Peak heat release rate of less than or equal to 25 kW/ft² (269 kW/m²)**
- 2. Absence of sustained flaming or glowing combustion of any kind at the conclusion of the 40-min observation period.**
- 3. Absence of falling particles that are still burning when reaching the burner or floor.**

709A.4.2 Conditions of acceptance for ASTM E2726: The ASTM E2726 test shall be conducted on a minimum of three test specimens and the conditions of acceptance in 1 and 2 below shall be met. If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the conditions of acceptance.

- 1. Absence of sustained flaming or glowing combustion of any kind at the conclusion of the 40-min observation period,**

2. Absence of falling particles that are still burning when reaching the burner or floor.

709A.5 Requirements for type of ignition-resistant material in Section 709A.3, item (6): The material shall be tested in accordance with ASTM E2632 and shall comply with the following condition of acceptance. The ASTM E2632 test shall be conducted on a minimum of three test specimens and the peak heat release rate shall be less than or equal to 25 kW/ft² (269 kW/m²). If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be run. All of the additional tests shall meet the condition of acceptance.

CHAPTER 35
REFERENCED STANDARDS

ASTM

ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959

Standard reference number	Title	Referenced in code section number
<u>E84-2013A2016</u>	<i>Standard Test Method for Surface Burning Characteristics of Building Materials...</i>	202, 402.6.4.4, 406.7.2, 703.5.2, 720.1, 720.4, 803.1.1, 803.1.4, 803.10, 803.11, 806.7, 1404.12.1, 1407.9, 1407.10.1, 1409.9, 1409.10.1, 1510.6.2, 1510.6.3, 2303.2, 2603.3, 2603.4.1.13, 2606.3.5.4, 2603.7.1, 2603.7.2, 2603.7.3, 2604.2.4, 2606.4, 2612.3, 2614.3, 3105.4
<u>E2632/E2632M-2013 e1</u>	<i>Standard Test Method for Evaluating the Under-Deck Fire Test Response of Deck Materials...</i>	<u>709A.3, 709A.4, 709A.4.1, 709A.5</u>
<u>E2707-2015</u>	<i>Standard Test Method for Determining Fire Penetration of Exterior Wall Assemblies Using a Direct Flame Impingement Exposure</i>	<u>707A.3, 707A.3.1, 708A.3</u>
<u>E2726/E2726-2012a</u>	<i>Standard Test Method for Evaluating the Fire-Test-Response of Deck Structures to Burning Brands</i>	<u>709A.3, 709A.4, 709A.4.2</u>
<u>E2886/E2886M-2014</u>	<i>Standard Test Method for Evaluating the Ability of Exterior Vents to Resist the Entry of Embers and Direct Flame Impingement</i>	<u>706A.2, 706A.3</u>
<u>E2957-2015</u>	<i>Standard Test Method for Resistance to Wildfire Penetration of Eaves, Soffits and Other Projections</i>	<u>707A.5, 707A.6, 707A.8, 707A.9</u>

Notation

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13108, 13108.5, 13114, 13143, 13146, 18949.2

Reference(s): Health and Safety Code Sections 13143, 13195, 18949.2

[Item 8. Editorial modifications of regulations for vegetation management in Wildland-Urban Interface Areas.]

701A.5 Vegetation management compliance. Prior to building permit final approval, the property shall be in compliance with the vegetation management requirements prescribed in California Fire Code Section 4906, including California Public Resources Code 4291 or

California Government Code Section 51182. Acceptable methods of compliance inspection and documentation shall be determined by the enforcing agency and shall be permitted to may include any of the following:

1. Local, state or federal fire authority or designee authorized to enforce vegetation management requirements
2. Enforcing agency
3. Third party inspection and certification authorized to enforce vegetation management requirements
4. Property owner certification authorized by the enforcing agency

Notation

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.65, 13108, 13108.5, 13114, 13143, 13146, 18949.2

Reference(s): Health and Safety Code Sections 13143, 13195, 18949.2

[Item 9. Automatic fire sprinklers in elevator machine area clarification]

3005.4.1 Automatic sprinkler system. Automatic sprinklers shall not be required to be installed in the elevator hoistway, elevator machine room, elevator machinery space, elevator control space, or elevator control room where all the following are met:

1. Approved smoke detectors shall be installed ~~in the elevator hoistway, elevator machine room, elevator machinery spaces, elevator control spaces, or elevator control rooms~~ and connected to the building fire alarm system in accordance with Section 907: in the area where the installation of fire sprinklers was exempted per this section".
2. Activation of any smoke detector located in the elevator hoistway, elevator machine room, elevator machinery space, elevator control space, or elevator control room shall cause the actuation of the building fire alarm notification appliances in accordance with 907.
3. Activation of any smoke detector located in the elevator hoistway, elevator machine room, elevator machinery space, elevator control space, or elevator control room shall cause all elevators having any equipment located in that elevator hoistway, elevator machine room, elevator machinery space, elevator control space, or elevator control room to recall nonstop to the appropriate designated floor in accordance with CCR Title 8, Division 1, Chapter 4, Subchapter 6, Elevator Safety Orders.
4. The elevator machine room, elevator machinery space, elevator control space, or elevator control room shall be enclosed with fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 712, or both. The fire-resistance rating shall not be less than the required rating of the hoistway enclosure served by the machinery. Openings in the fire barriers shall be protected with assemblies having a fire protection rating not less than that required for the hoistway enclosure doors. The exceptions to Section 3005.4 shall not apply.
5. The building fire alarm system shall be monitored by an approved supervising station in accordance with 907.
6. An approved sign shall be permanently displayed in the area where the installation of fire sprinklers was exempted per this section",
~~in the elevator machine room, elevator machinery space, elevator control space, or elevator~~

~~control room~~ in a conspicuous location with a minimum of 1½ inch letters on a contrasting background, stating:

NO COMBUSTIBLE STORAGE
PERMITTED IN THIS ROOM
By Order of the Fire Marshal [or name of fire authority]

[Chapter 35 – Referenced Standards]

***Revise Section 8.15.5.3 to read as follows:**

8.15.5.3 Automatic sprinkler system. Automatic sprinklers shall not be required to be installed in the elevator hoistway, elevator machine room, elevator machinery space, elevator control space, or elevator control room where all the following are met:

1. Approved smoke detectors shall be installed and connected to the building fire alarm system in accordance with Section 907 in the area where the fire sprinkler was removed per this section.
2. Activation of any smoke detector located in the elevator hoistway, elevator machine room, elevator machinery space, elevator control space, or elevator control room shall cause the actuation of the building fire alarm notification appliances in accordance with 907.
3. Activation of any smoke detector located in the elevator hoistway, elevator machine room, elevator machinery space, elevator control space, or elevator control room shall cause all elevators having any equipment located in that elevator hoistway, elevator machine room, elevator machinery space, elevator control space, or elevator control room to recall nonstop to the appropriate designated floor in accordance with CCR Title 8, Division 1, Chapter 4, Subchapter 6, Elevator Safety Orders.
4. The elevator machine room, elevator machinery space, elevator control space, or elevator control room shall be enclosed with fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 712, or both. The fire-resistance rating shall not be less than the required rating of the hoistway enclosure served by the machinery. Openings in the fire barriers shall be protected with assemblies having a fire protection rating not less than that required for the hoistway enclosure doors. The exceptions to Section 3005.4 shall not apply.
5. The building fire alarm system shall be monitored by an approved supervising station in accordance with 907.
6. An approved sign shall be permanently displayed in the room where the fire sprinkler was removed per this section in a conspicuous location with a minimum of 1½ inch letters on a contrasting background, stating:

NO COMBUSTIBLE STORAGE
PERMITTED IN THIS ROOM
By Order of the Fire Marshal [or name of fire authority]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2

References: Health and Safety Code Sections 13143, 13211, 18949.2,

[Item 10. High-rise fire alarm circuits clarification and modifications.]

907.6.1.1 High-rise Buildings. *Wiring for fire alarm signaling line circuits, initiating circuits, and notification circuits in high-rise buildings shall be in accordance with the following:*

1. *Class A in accordance with NFPA 72.*

Exception: *Initiating circuits which serve only a single initiating device.*

2. *Enclosed in continuous metallic raceways or raceways encased in not less than 2 inches (51mm) of concrete in accordance with the California Electrical Code.*

Exception: *Metallic cable (MC) shall be permitted for fire alarm notification circuits where continuous metallic raceways are not required for survivability.*

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2

References: Health and Safety Code Sections 13143, 13211, 18949.2

[Item 11. Editorial modifications of regulations for the term Primary Structural Frame.]

403.2.1.1 Type of construction. The following reductions in the minimum fire-resistance rating of the building elements in Table 601 shall be permitted as follows:

1. For buildings not greater than 420 feet (128 000 mm) in building height, the fire-resistance rating of the building elements in Type IA construction shall be permitted to be reduced to the minimum fire-resistance ratings for the building elements in Type IB.

Exception: The required fire-resistance rating of the Primary Structural Frame shall not be reduced.

2. In other than Group F-1, M and S-1 occupancies, the fire-resistance rating of the building elements in Type IB construction shall be permitted to be reduced to the fire-resistance ratings in Type IIA.

Exception: *The required fire-resistance rating of the primary structural frame shall not be permitted to be reduced.*

3. The building height and building area limitations of a building containing building elements with reduced fire-resistance ratings shall be permitted to be the same as the building without such reductions.

TABLE 601
[The table is not shown]

For SI: 1 foot = 304.8 mm.

a. Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.

b.1. Except in Group A, E, F-1, H, I, L, M, R-1, R-2, R-2.1 and S-1 *occupancies, high-rise buildings, and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal*, fire protection of primary structural members shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.

b.2 For Group A, E, I, L, R-1, R-2, and R-2.1 *occupancies, high-rise buildings, and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal*, fire protection of members other than the primary structural frame shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.

b.3. One-story portions of Group A and E assembly occupancies the roof-framing system of Type II A or Type III A construction may be of unprotected construction when such roof-framing system is open to the assembly area and does not contain concealed spaces.

c. In all occupancies, heavy timber shall be allowed where a 1-hour or less fire-resistance rating is required.

d. Not less than the fire-resistance rating required by other sections of this code.

e. Not less than the fire-resistance rating based on fire separation distance (see Table 602).

f. Not less than the fire-resistance rating as referenced in Section 704.10.

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2

References: Health and Safety Code Sections 13143, 13211, 18949.2

[Item 12. Definitions for detention facilities addition and modifications]

[Section 202]

CELL TIERS. *Cells, dormitories and accessory spaces. Cell tiers are located one level above the other, and do not exceed two levels per floor. A cell tier shall not be considered a story ~~of~~ or mezzanine. The aggregate area of a tier within a housing pod shall not be greater than one-third of the floor area of that pod when supported by non-rated construction, and shall be no greater than two-thirds of the floor area of the pod when the tier floor and supporting elements meet the fire rating requirements of a floor.*

CONTROL ROOM. *A room that has staff that provides direct supervision of one or more, cell tiers, pods, dormitories, housing units, sally ports, central holding areas, individual holding cells within central holding areas, as well as any number of courtroom holding cells and arraignment docks, and may have fire and personal alarm annunciation, ability to open and close doors, communicate with Central Control and monitor activities inside the area of control and the space immediately outside the Control Room's zone of influence.*

CORRECTIONAL HOSPITALS. *Facilities that provide care and treatment for medical, psychiatric, obstetrical, or surgical treatment of care recipients that are incapable of self-preservation within a detention facility such as a prison or jail.*

CORRECTIONAL MEDICAL OR MENTAL HEALTH HOUSING SUITE. *Within a state prison, correctional treatment facility, local detention facility, or juvenile facility, a correctional medical or mental health housing suite shall be a group of patient rooms or cells and support spaces, including nurses' stations, located around shared circulation.*

CORRECTIONAL MENTAL HEALTH FACILITIES. *Facilities that provide care and treatment for psychiatric treatment of care recipients that are incapable of self-preservation within a detention facility such as a prison or jail.*

CORRECTIONAL NURSING FACILITIES. *Facilities that provide care, including both intermediate care facilities and skilled nursing facilities where any of the persons are incapable of self-preservation or classified as non-ambulatory or bedridden within a detention facility such as a prison or jail.*

CORRECTIONAL TREATMENT CENTERS. *Facilities that provide emergency and acute care and treatment for medical, psychiatric, obstetrical, or surgical treatment of care recipients that are incapable of self-preservation within a detention facility such as a prison or jail.*

CUSTODY STATION. *A desk or platform staffed by one or more custody officers whose purpose is to supervise those in custody.*

DETENTION PROGRAM SUITE. *Within a state prison, correctional treatment facility, local detention facility, or juvenile facility, a detention program suite shall be a group of program related spaces, not classified as group F uses, located around shared circulation.*

HOUSING POD. *A section of a housing unit designed to segregate different populations. Housing Pods contain sleeping areas, dayroom space, showers, toilet facilities, and support space.*

HOUSING UNIT. ~~A dormitory or a group of cells with a common dayroom in Group I-3. A building or portion of a building~~ *An area intended to lodge inmates on a 24-hour basis where accommodations are provided for sleeping and other inmate support areas. A Housing Unit may contain one or more housing pods.*

INTAKE AND RELEASE AREAS. *A temporary holding suite where detained and/or incarcerated individuals are received and processed into a facility or are released from the*

facility. The suite may contain holding cells, sobering and safety cells, medical examination space, interview rooms, property storage, and staff work areas.

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 13. I occupancy description clarification and modifications.]

CBC 308.1 Institutional Group I. Institutional Group I occupancy includes, among others, the use of a building or structure, or a portion thereof, in which care or supervision is provided to persons who are or are not capable of self-preservation without physical assistance or in which persons are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-2.1, I-3 or I-4. Restraint shall not be permitted in any building except in Group I-2 occupancies constructed for such use in accordance with Section 407.1.2 and Group I-3 occupancies constructed for such use, in accordance with Section 408.1.2., see Section 408.1.1.

Where occupancies house both ambulatory and nonambulatory persons, the more restrictive requirements shall apply.

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 14. I-2 occupancies with restraint clarification and modifications.]

CBC 407.1.2 Construction. Occupancies in Group I-2 wherein mental health patients are restrained are permitted to be housed in one story buildings of Type IIA, Type IIIA or Type VA construction provided the floor area does not exceed 5,200 square feet (483m²) between fire walls of two-hour fire-resistive construction with openings protected by fire assemblies having a 1-½ hour fire protection rating.

CHAPTER 5 – GENERAL BUILDING HEIGHTS AND AREAS

**TABLE 504.4
ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE**

OCCUPANCY	TYPE OF CONSTRUCTION				
	TYPE I	TYPE II	TYPE III	TYPE IV	TYPE V

CLASSIFICATION	SEE FOOTNOTES	A	B	A	B	A	B	HT	A	B
I-2 / I-2.1 ^j	NS ^{d, t}	UL	4	2						
	S (without area increase)	UL	5	3	1	1	NP	1	1	NP
	S (with area increase)	UL	4	2						

i . See Sections 407.1.2 and 408.1.2 for specific exceptions to construction type, allowable building areas and allowable heights.

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 15. Clarification and modifications in the table for I-2 with restraint.]

TABLE 803.11 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

GROUP	SPRINKLERED ^l			NONSPRINKLERED		
	Interior exit stairways and interior exit ramps and exit passageways ^{a, b}	Corridors and enclosure for exit access stairways and exit access ramps	Rooms and enclosed spaces ^c	Interior exit stairways and interior exit ramps and exit passageways ^{a, b}	Corridors and enclosure for exit access stairways and exit access ramps	Rooms and enclosed spaces ^c
I-2 ⁿ , I-2.1	B	B	B ^{h, i}	A	A	B

Footnote n. Where patients are restrained in psychiatric treatment areas of Group I-2, finishes shall comply with the requirements of a Group I-3.

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 16. Clarification and modifications for I-2 with restraint.]

CBC 804.4.1 Test requirement. In all other occupancies except Group I-3 and Group I-2 areas where patients are restrained, interior floor finish and interior floor covering materials shall comply with the requirements of ASTM Standard E 648, and having a specific optical density smoke rating not to exceed 450 per ASTM E662. For Group I-3 occupancies and Group I-2 areas where patients are restrained, see Section 804.4.3.

CBC 804.4.2 Minimum critical radiant flux. In all occupancies, interior floor finish and floor covering materials in enclosures for stairways and ramps, exit passageways, corridors and rooms or spaces not separated from corridors by partitions extending from the floor to the underside of the ceiling shall withstand a minimum critical radiant flux. The minimum critical radiant flux shall be not less than Class I in Groups I-2 and R-2.1 and not less than Class II in Groups A, B, E, H, I-2.1, I-4, M, R-1, R-2 and S. For Group I-2 areas where patients are restrained, see Section 804.4.3.

CBC 804.4.3 Group I-2 and Group I-3 floor surfaces. Interior floor finish and floor coverings occupied by inmates or patients whose personal liberties are restrained shall be noncombustible.

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 17. Adoption of model code with modifications for controlled egress I-2 occupancies.]

CBC 1010.1.9.6 Controlled egress doors in Groups I-1 and I-2. Electric locking systems, including electromechanical locking systems and electromagnetic locking systems, shall be permitted to be locked in the means of egress in Group I-1 or I-2 occupancies where the clinical needs of persons receiving care require their containment. Controlled egress doors shall be permitted in such occupancies where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or and an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors are installed and operate in accordance with all of the following:

1. The door locks shall unlock on actuation of the automatic sprinkler system or automatic ~~fire~~ smoke detection system.
2. The door locks shall unlock on loss of power controlling the lock or lock mechanism.
3. The door locking system shall be installed to have the capability of being unlocked by a switch located at the fire command center, a nursing station or other approved location. The switch shall directly break power to the lock.
4. A building occupant shall not be required to pass through more than one door equipped with a controlled egress locking system before entering an exit.
5. All ~~clinical~~ staff shall have the keys, codes or other means necessary to operate the locking systems.
6. Emergency lighting shall be provided at the door.
7. The door locking system units shall be listed in accordance with UL 294.

Exceptions:

1. Items 1 through 4 shall not apply to doors to areas occupied by persons who, because of clinical needs, require restraint or containment as part of the function of a psychiatric treatment area.
2. Items 1 through 4 shall not apply to doors to areas where a *listed* egress control system is utilized to reduce the risk of child abduction from nursery and obstetric areas of a Group I-2

hospital.

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 18. Intervening spaces in I-2 occupancies with detention clarification and modifications.]

CBC 1016.2 Egress through intervening spaces. Egress through intervening spaces shall comply with this section.

1. Exit access through an enclosed elevator lobby is permitted *in other than a Group I-2 and I-2.1*. Access to not less than one of the required exits shall be provided without travel through the enclosed elevator lobbies required by Section 3006. Where the path of exit access travel passes through an enclosed elevator lobby, the level of protection required for the enclosed elevator lobby is not required to be extended to the exit unless direct access to an exit is required by other sections of this code.

2. Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where such adjoining rooms or areas and the area served are accessory to one or the other, are not a Group H occupancy and provide a discernible path of egress travel to an exit.

Exception: Means of egress are not prohibited through adjoining or intervening rooms or spaces in a Group H, S or F occupancy where the adjoining or intervening rooms or spaces are the same or a lesser hazard occupancy group.

3. An exit access shall not pass through a room that can be locked to prevent egress.

4. Means of egress from dwelling units or sleeping areas shall not lead through other sleeping areas, toilet rooms or bathrooms.

5. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes.

Exceptions:

1. Means of egress are not prohibited through a kitchen area serving adjoining rooms constituting part of the same dwelling unit or sleeping unit.

2. Means of egress are not prohibited through stockrooms in Group M occupancies where all of the following are met:

2.1. The stock is of the same hazard classification as that found in the main retail area.

2.2. Not more than 50 percent of the exit access is through the stockroom.

2.3. The stockroom is not subject to locking from the egress side.

2.4. There is a demarcated, minimum 44 inch-wide (1118 mm) aisle defined by full- or partial-height fixed walls or similar construction that will maintain the required width and lead directly from the retail area to the exit without obstructions.

6. ~~Exits~~ *The means of egress shall not pass through any room subject to locking except in Group I-3 occupancies classified as detention facilities and psychiatric treatment areas in Group I-2 occupancies.*

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

Item 19. I-3 occupancies healthcare provisions clarification and modifications.]

CBC 308.5 Institutional Group I-3. Institutional Group I-3 occupancy shall include buildings or portions of buildings and structures that are inhabited by one or more persons who are under restraint or security. An I-3 facility is occupied by persons who are generally incapable of self-preservation due to security measures not under the occupants' control, *which includes persons restrained*. This group shall include, but not be limited to, the following:

Correctional Centers

Correctional Hospitals

Correctional Nursing Facilities

Correctional Mental Health Facilities

Correctional Treatment Centers

Courthouse Holding Facility

Detention Centers

Detention Treatment Room

Jails

Juvenile Halls

Prerelease Centers

Prisons

Reformatories

Secure Interview Rooms

Temporary holding facility

Buildings of Group I-3 shall be classified as one of the occupancy conditions indicated in Sections 308.5.1 through 308.5.8 (see Section 408.1).

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 20. I-3 addition of Condition 9 for healthcare.]

CBC 308.5.6 Condition 9. *This occupancy condition shall include buildings where the use of the building is for correctional medical care or correctional mental health care.*

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 21. Intervening spaces in I-3 occupancies clarification and modifications.]

CBC 408.1.2.2 Intervening spaces. *Common rooms and spaces within Group I-3 occupancies can be considered an intervening space in accordance with Section 1014.2, and not considered a corridor, when they meet any of the following:*

1. Within prisons and local detention facilities of Type I Construction, ~~The inmate and/or staff movement is within cell complexes, medical housing wings and mental health housing wings of Type I construction.~~ the exit access within a housing unit, may be a non-rated corridor provided the required exit occupant load from any dayroom does not exceed 64 persons.

2. Within prison, jails, and courthouses: ~~Area within any~~ temporary holding areas of noncombustible construction and an occupant load less than 100.

3. Within prisons and local detention facilities, ~~Areas within secure mental health treatment facilities~~ correctional medical or mental health housing suites, of noncombustible construction, and an occupant load less than 100.

4. Within prisons and local detention facilities: detention program areas of noncombustible construction and an occupant load less than 100.

CBC 1020.1 Construction. Corridors shall be fire-resistance rated in accordance with Table 1020.1. The corridor walls required to be fire-resistance rated shall comply with Section 708 for fire partitions.

[Authors Note: Exceptions 1-6 unchanged]

7. *A fire-resistance rating is not required for corridors within Group I-3 occupancies that comply with intervening spaces, see Section 408.1.2.2.*

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 22. Security doors in I-3 occupancies clarification and modifications.]

CBC 408.1.3 Security door assemblies in corridors, smoke barriers, and smoke partitions.
Security door assemblies shall be constructed in accordance with NFPA 252 or UL 10C, and where a smoke rating is required UL 1784, and are not required to be tested or labeled.

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 23. Healthcare in Chapter 4 clarification and modifications.]

CBC 408.2.1 Correctional medical and mental health uses. *Where a Group I-2 occupancy in accordance with Section 308.4 and an I-3 occupancy I-3 Condition 9 occurs together in buildings or a portions of a buildings, the following Subsections of Section 407 shall apply: 407.2.1; 407.2.2; 407.2.3; 407.3.1; 407.3.1.1; 407.4; 407.11.2.*

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 24. Custody stations in I-3 occupancies clarification and modifications.]

CBC 408.3.12 Custody Station. Spaces for custody stations, communications and related clerical areas shall be permitted to be open to, or located within the corridor, provided the required construction along the perimeter of the corridor is maintained. Construction of custody stations or portions of custody stations, within the envelope of the corridor, is not required to be fire-resistive rated. These provisions shall also apply to an enclosed custody station within the corridor.

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 25. Smoke control in I-3 occupancies clarification and modifications.]

CBC 408.9.1 Smoke venting. *The housing portions of windowless buildings containing use conditions 3, 4 or 5 shall be provided with an engineered smoke control system in accordance with Section 909, windows or doors, smoke vents, or equivalent means to provide a tenable environment for exiting from the smoke compartment in the area of fire origin. A tenable environment for egress shall be as defined in NFPA 92. If windows, smoke vents or doors are used to meet this section, at least two windows, smoke vents or doors to the exterior must be provided at or above the highest occupied level in each smoke compartment, and the windows or doors must be operable or readily breakable and arranged to manually vent smoke.*

Exceptions:

1. ~~Local adult detention facilities, CDCR and CDCR mental health housing facilities~~ Windowless buildings or portions of a building shall be exempt from this section when they that meet each all of the following ~~criteria~~ requirements:

1.1. Are Type IA or IB construction.

1.2. Are protected with sprinklers throughout in accordance with Section 903.3.1.1.

1.3. Include a fire alarm system with smoke detection in accordance with NFPA 72 in the dayroom and/or corridor serving as exit access from the cells, reporting to a 24-hour central control at the institution.

1.4. Include at least one exit from each housing unit ~~that discharges directly to the exterior where smoke will not accumulate or to the exterior through a 1 hour rated corridor serving only that unit.~~

1.5. The building is divided into at least two smoke compartments per Section 408.6.1.

1.6. As approved by the enforcing agency, ~~staffing in the institution is sufficient to an egress analysis shows that inmates can be evacuated-inmates within 6 minutes~~ from the smoke compartment of origin 24 hours per day or when inmates are present, as approved by the enforcing agency or the facility is provided with gang or electric locks.

2. No venting or smoke control is required when an engineering analysis shows an acceptable safe egress time compared to the onset of untenable conditions within a windowless building or portion of a windowless building and approved by the enforcing agency.

3. Courtroom holding areas and Temporary Central holding areas in Courthouses that they meet all of the following requirements:

3.1. Holding occurs for a duration less than 12 hours.

3.2. The holding areas include no electrical outlets available to the detainees.

3.3. The entire building includes sprinklers throughout in accordance with Section 903.3.1.1.

3.4. The building includes a fire alarm system with smoke detection in accordance with NFPA 72 in the common rooms of holding areas and in the cells of Central holding. The fire alarm system shall activate an alert signal on the floor of alarm containing the holding areas, to alert staff.

3.5. As approved by the enforcing agency, an egress analysis shows that detainees can be evacuated within 5 minutes from the holding area of origin, or the facility is provided with gang or electric locks.

4. Courtroom holding areas with less than 20 persons in custody.

5. Windowless buildings or portions of a building that meet all of the following requirements:

5.1. Are Type IA or IB construction.

5.2. Are protected with sprinklers throughout in accordance with Section 903.3.1.1.

5.3. Include a fire alarm system with smoke detection in accordance with NFPA 72 in the dayrooms and corridors serving as exit access from the cells, reporting to a 24-hour central control at the institution.

5.4. Include at least one direct exit from each housing unit through a smoke partition to another smoke compartment. Each housing unit must be its own smoke compartment and can exit through a maximum of one adjacent compartment before reaching a corridor or the exterior.

5.5. As approved by the enforcing agency, an egress analysis shows that inmates can be evacuated inmates within 6 minutes from the smoke compartment of origin 24 hours per day or when inmates are present, or the facility is provided with gang or electric locks.

5.6. Each housing unit includes a pressurization method smoke control system that complies with Section 909.

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 26. Accessory occupancies in I-3 occupancies clarification and modifications.]

CBC 508.2.4 Separation of occupancies. No separation is required between accessory occupancies and the main occupancy.

Exceptions:

1. Group H-2, H-3, H-4, H-5 and L occupancies shall be separated from all other occupancies in accordance with Section 508.4. 2.
2. Group R-1, R-2, R-2.1 and R-3 dwelling units and sleeping units shall be separated from other dwelling or sleeping units and from accessory occupancies contiguous to them in accordance with the requirements of Section 420.
3. *No separation is required between Group B, E, R-2 sleeping units and S-2 occupancies accessory to Group I-2 and I-2.1 and I-3 of Type I Construction. Group I-2 and I-2.1 shall be separated from all other occupancies in accordance with Section 508.4.*
4. *No separation is required between Group A, B, E, R-2 sleeping units and S-2 occupancies accessory to Group I-3 of Type I Construction. Group I-3 and vehicle sallyports shall be separated from all other occupancies in accordance with Section 508.4.*

CBC 508.3.3 Separation. No separation is required between nonseparated occupancies.

Exceptions:

1. Group H-2, H-3, H-4, H-5, I-2, I-2.1 and L occupancies shall be separated from all other occupancies in accordance with Section 508.4.
2. Group I-1, R-1, R-2, R-2.1 and R-3 dwelling units and sleeping units shall be separated from other dwelling or sleeping units and from other occupancies contiguous to them in accordance with the requirements of Section 420.
3. *No separation is required between Group A, B, E, R-2 sleeping units and S-2 occupancies accessory to Group ~~I-2, I-2.1~~ and Group I-3 of Type I Construction. Group I-3 and vehicle sallyports shall be separated from all other occupancies in accordance with Section 508.4.*

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 27. Healthcare areas in I-3 occupancies clarification and modifications.]

CFC 907.2.6.2.2 Automatic fire detection. *Smoke detectors shall be provided in accordance with this section.*

1. *In patient and client sleeping rooms. Actuation of such detectors shall cause a visual display on the corridor side of the room in which the detector is located and shall cause an audible and*

visual alarm at the respective nurses' station. A nurse call system listed for this function is an acceptable means of providing the audible and visual alarm at the respective nurses' station and corridor room display. Operation of the smoke detector shall not include any alarm verification feature.

Exception: *In patient and client rooms equipped with existing automatic door closers having integral smoke detector, the integral smoke detector is allowed to substitute for the room smoke detector, provided it meets all the required alerting functions.*

2. Group I-2 nurses' stations. A minimum of one (1) smoke detector shall be installed at the nurses' station and centrally located.

3. In waiting areas and corridors onto which they open, in the same smoke compartment, in accordance with Section 407.2.1.

4. In areas where patients are restrained, smoke detectors shall be installed at ceilings throughout all occupied areas and mechanical/electrical spaces of smoke compartments and in adjacent smoke compartments where occupants of those compartments utilize the same means of egress.

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 28. Guard on observation towers in I-3 at detention facilities clarification and modifications.]

1015.2 Where required. Guards shall be located along open-sided walking surfaces, including mezzanines, equipment platforms, aisles, stairs, ramps, and landings that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Guards shall be adequate in strength and attachment in accordance with Section 1607.8.

Exception: Guards are not required for the following locations:

[exceptions 1 through 7 unchanged]

8. Elevated facility observation station access hatches at detention facilities.

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 29. Area of refuge in I-3 occupancies modifications.]

CBC 1028.5 Access to a public way. The exit discharge shall provide a direct and unobstructed access to a public way.

Exception: Where access to a public way cannot be provided, a safe dispersal area shall be provided where all of the following are met:

1. The area shall be of a size to accommodate not less than 5 square feet (0.46 m²) for each person.
2. *For other than Group E buildings, the area shall be located on the same lot not less than 50 feet (15 240 mm) away from the building requiring egress. For Group E buildings, the area shall be located on the same lot at least 50 feet (15 240 mm) away from any building.*
3. The area shall be permanently maintained and identified as a safe dispersal area.
4. The area shall be provided with a safe and unobstructed path of travel from the building.
5. *In correctional facilities, the area shall be of a size to accommodate not less than 7 square feet (0.6503 m²) for each person. Accessible path of egress travel to the safe dispersal area and clear ground space for 5% of the occupants meeting 11B-305.3 shall be provided.*

Notation:

Authority: Health and Safety Code Sections 1250, 13108, 13114, 13143, 13143.2, 13143.6, 13146, 17921, 18949.2

References: Health and Safety Code Sections 13143, 18949.2

[Item 30. Correlation of Educational occupancy editorial changes to removal duplication and provide clarity.]

[F] 903.2.3 Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 12,000 square feet (1115 m²) in area.
2. Throughout every portion of educational buildings below the lowest *level of exit discharge* serving that portion of the building.

Exception: An automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area where every classroom throughout the building has at least one exterior exit door at ground level.

3. *In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in quantities not exceeding the maximum allowable quantity are used or stored.*
4. *Throughout any Group E structure greater than 12,000 square feet (1115 m²) in area, which contains more than one fire area, and which is separated into two or more buildings by fire walls of less than four hour fire resistance rating without openings.*
5. *For public school state funded construction projects see Section 903.2.19.*
6. *For public school campuses: Kindergarten through 12th grade, see section 903.2.20*

903.2.11.6 Other required suppression systems.

In addition to the requirements of Section 903.2, the provisions indicated in Table 903.2.11.6 also require the installation of a fire suppression system for certain buildings and areas.

903.2.19 Public school state funded construction projects for kindergarten through 12th grade — automatic sprinkler system requirements.

903.2.19.1 New public school campus. *An automatic sprinkler system shall be provided in all occupancies. The provisions of this section shall apply to any public school project consisting of one or more buildings on a new school campus and receiving state funds pursuant to Leroy F. Greene School Facilities Act of 1998, California Education Code sections 17070.10 through 17079. For purposes of this section, new campus refers to a school site, where an application for construction of original buildings was made to DSA on or after July 1, 2002.*

An automatic fire sprinkler system is not required in locations identified in Section 903.2.20

Exceptions:

- ~~1. A relocatable building that is sited with the intent that it be at the site for less than three years and is sited upon a temporary foundation in a manner that is designed to permit easy removal. Also see CCR, Title 24, Part 1, California Administrative Code, Section 4-314 for definition of relocatable building.~~
- ~~2. Detached buildings designed and used for non-instructional purposes that meet the applicable requirements for that occupancy. Buildings would include, but not be limited to:

Concession Stand
Press Box
Restroom Facilities
Shade Structure
Snack Bar~~

~~Storage Building~~
~~Ticket Booth~~

903.2.20 Public School Campuses. An automatic fire sprinkler system is not required to be provided in the following locations on Kindergarten through 12th grade.

1. A relocatable building that is sited with the intent that it be at the site for less than three years and is sited upon a temporary foundation in a manner that is designed to permit easy removal. Also see CCR, Title 24, Part 1, California Administrative Code, Section 4-314 for definition of relocatable building.

2. Detached buildings designed and used for non-instructional purposes that meet the applicable requirements for that occupancy. Buildings would include, but not be limited to a:

Concession Stand
Press Box
Restroom Facility
Shade Structure
Snack Bar
Storage Building
Ticket Booth

[F] 907.2.3 Group E. ~~An manual and automatic~~ fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E occupancies *with an occupant load of 50 or more persons or containing more than one classroom or one or more rooms used for Group E or I-4 day care purposes in accordance with this section.* When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. One additional manual fire alarm box shall be located at the administration office or location approved by the AHJ.

Exceptions:

~~1. Emergency voice/alarm communication systems meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall not be required in Group E occupancies with occupant loads of 100 or less, provided that activation of the manual fire alarm system initiates an approved occupant notification signal in accordance with Section 907.5.~~

~~2. Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:~~

~~2.1. Interior corridors are protected by smoke detectors.~~

~~2.2. Auditoriums, cafeterias, gymnasiums and similar areas are~~

~~_____protected by heat detectors or other approved detection devices.~~

~~2.3. Shops and laboratories involving dusts or vapors are
protected _____ by heat detectors or other approved detection devices.~~

~~3. Manual fire alarm boxes shall not be required in Group E occupancies
where all of the following apply:~~

~~3.1. The building is equipped throughout with an approved
automatic _____ sprinkler system installed in accordance with Section
903.3.1.1.~~

~~3.2. The emergency voice/alarm communication system will
activate _____ on sprinkler water flow.~~

~~3.3. Manual activation is provided from a normally occupied
location.~~

~~3.4. The capability to activate the evacuation signal from a central
_____ point is provided.~~

~~14. For public school state funded construction projects see Section
907.2.29.~~

~~2. For public schools see Section 907.2.3.7~~

~~3. For private schools see Section 907.2.3.8~~

907.2.3.7 Public School Campuses. An automatic fire alarm system in compliance with section 907.2.3 shall be provided in new buildings for all occupancies on Kindergarten through 12th grade public school campuses.

Exceptions:

1. A manual fire alarm system may be provided for a relocatable building that is sited with the intent that it be at the site for less than three years and is sited upon a temporary foundation in a manner that is designed to permit easy removal. Also see CCR, Title 24, Part 1, California Administrative Code, Section 4-314 for definition of relocatable building.

2. A fire alarm system is not required for detached buildings designed and used for non-instructional purposes that meet the applicable requirements for that occupancy. Buildings would include, but not be limited to a:

Concession Stand
Press Box
Restroom Facility
Shade Structure
Snack Bar

Storage Building
Ticket Booth

907.2.3.78 Private schools. *An automatic fire alarm system shall be provided in new buildings of private schools.*

Exception: *Automatic detection devices are not required where an approved automatic sprinkler system is installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate on sprinkler water flow and manual activation is provided from a normally occupied location.*

907.2.3.89 Day-care, Group E.

907.2.3.89.1 *An automatic fire alarm system shall be provided in all buildings used as or containing a Group E day-care.*

Exception: *Automatic detection devices are not required where an approved automatic sprinkler system is installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate on sprinkler water flow and manual activation is provided from a normally occupied location.*

907.2.3.89.2 *Smoke detectors shall be installed in every room used for sleeping or napping.*

907.2.3.10 Day-care, Group E or Group I-4 located on a public school campus. *An automatic fire alarm system shall be provided in all buildings used as or containing a Group E or Group I-4 day-care.*

907.2.29 Public school state funded construction projects for kindergarten through 12th grade — automatic fire alarm system requirements.

~~**907.2.29.1 New public school campus.** An automatic fire alarm system shall be provided in all occupancies that activates the occupant notification system signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6. The provisions of this section shall apply to any public school project consisting of one or more buildings on a new school campus and receiving state funds pursuant to Leroy F. Greene School Facilities Act of 1998, California Education Code sections 17070.10 through 17079. For purposes of this section, new campus refers to a school site, where an application for construction of original buildings was made to DSA on or after July 1, 2002.~~

Exceptions:

~~1. A relocatable building that is sited with the intent that it be at the site for less than three years and is sited upon a temporary foundation in a manner that is designed to permit easy removal. Also see CCR, Title 24, Part 1, California Administrative Code, Section 4-314 for definition of~~

~~relocatable building.~~

~~2. Detached buildings designed and used for non-instructional purposes that meet the applicable requirements for that occupancy. Buildings would include, but not be limited to:~~

~~Concession Stand
Press Box
Restroom Facilities
Shade Structure
Snack Bar
Storage Building
Ticket Booth~~

~~3. Emergency voice/alarm communication systems meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall not be required in Group E occupancies with occupant loads of 100 or less, provided that activation of the manual fire alarm system initiates an approved occupant notification signal in accordance with Section 907.5.~~

~~907.2.29.2 New building on an existing public school campus.~~ ~~An automatic fire alarm system shall be provided in all occupancies. The provisions of this section shall apply to any public school project construction of a new building on an existing campus and receiving state funds pursuant to Leroy F. Green, School Facilities Act of 1998, California Education Code sections 17070.10 through 17079. For purposes of this section, an existing campus refers to a school site, where an application for construction of original buildings was made to DSA prior to July 1, 2002.~~

~~Exceptions:~~

~~1. A construction project that has an estimated total cost of less than \$200,000.~~

~~2. A relocatable building that is sited with the intent that it be at the site for less than three years and is sited upon a temporary foundation in a manner that is designed to permit easy removal. See California Administrative Code, Section 4-314 for definition of relocatable building.~~

~~3. Detached buildings designed and used for non-instructional purposes that meet the applicable requirements for that occupancy. Buildings would include, but not be limited to:~~

~~Concession Stand
Press Box
Restroom Facilities
Shade Structure
Snack Bar
Storage Building~~

~~Ticket Booth~~

907.2.29.31 Alterations to existing buildings on an existing public school campus. *An automatic fire alarm system shall be provided for all portions within the scope of an alteration project. The provisions of this section shall apply to any public school project on an existing campus and receiving state funds pursuant to Leroy F. Green, School Facilities Act of 1998, California Education Code sections 17070.10 through 17079. For purposes of this section, an existing campus refers to a school site, where an application for construction of original buildings was made to DSA prior to July 1, 2002.*

Exceptions:

- 1. A manual fire alarm system may be provided for a construction project that has an estimated total cost of less than \$200,000.*
- 2. A manual fire alarm system may be provided for a relocatable building that is sited with the intent that it be at the site for less than three years and is sited upon a temporary foundation in a manner that is designed to permit easy removal. See California Administrative Code, Section 4-314 for definition of relocatable building.*
- 3. A fire alarm system is not required for dDetached buildings designed and used for non-instructional purposes that meet the applicable requirements for that occupancy. Buildings would include, but not be limited to a:*

*Storage Building
Ticket Booth
Concession Stand
Snack Bar
Restroom Facility
Shade Structure
Press Box*

~~907.2.29.4 Day-care, Group E or Group I-4 located on a public school campus.~~ *An automatic fire alarm system shall be provided in all buildings used as or containing a Group E or Group I-4 day-care.*

[F] 907.6.6.2 Termination of monitoring service. Termination of fire alarm monitoring services shall be in accordance with Section 901.9.

907.6.6.3 Group E schools. Automatic f~~Fire~~ alarm systems shall be monitored and shall transmit the alarm, supervisory and trouble signals to an approved supervising station in accordance with NFPA 72. The supervising station shall be listed as either UUFX (central station) or UUJS (remote & proprietary) by the Underwriters Laboratory Inc. (UL) or other approved listing and testing laboratory or shall comply with the requirements of FM 3011. Termination of monitoring services shall be in accordance with Section 907.6.5.2.

[Item 31. Educational occupancy editorial changes to provide clarity.]

The OSFM is proposing the above the above regulations recommended from the E Occupancy Task Force (2016). This proposal is editorial in nature. It is to provide clarity by eliminating duplication of regulations, move text and modify language with no regulatory changes.

452.1.4 Special provisions. Rooms and other spaces used by kindergarten, first-, or second–grade pupils, and Group E day care, shall not be located above or below the first story.

[Item 32. Educational occupancy modification to corridors.]

TABLE 1020.1 CORRIDOR FIRE-RESISTANCE RATING

OCCUPANCY	OCCUPANT LOAD SERVED BY CORRIDOR	REQUIRED FIRE-RESISTANCE RATING (hours)	
		Without sprinkler system	With sprinkler system ^c
H-1, H-2, H-3	All	Not Permitted	1
H-4, H-5, L	Greater than 30	Not Permitted	1
A ^d , B, F, M, S, U	Greater than 30	1	0
R-1, R-2, R-3, R-3.1, R-4	Greater than 10	Not Permitted	1
I-2 ^a , I-2.1, I-4	<i>Greater than 6</i>	Not Permitted	1
I-3, R-2.1	<i>Greater than 6</i>	Not Permitted	1 ^b
E	<i>Greater than 10</i>	1	10

[Item 33. Fire protection of Pet Boarding Facilities.]

**SECTION 441
PET KENNELS AND PET BOARDING FACILITIES [SFM]**

441.1 *These regulations shall apply to every building or fire area in which a pet boarding facility operates, as defined in Health and Safety Code Section 12238, or a pet dealer, as defined in Health and Safety Code Section 122125, maintains a kennel.*

441.2 Automatic sprinkler system. *An approved automatic sprinkler system complying with California Fire Code Section 903 shall be installed.*

Exception: *Where a fire alarm system that is connected to a central reporting station that alerts the local fire department in case of fire.*

[Item 34. Definition of Approved - editorial change.]

[A] APPROVED. Acceptable to the building official or enforcing agency.

[Item 35. Gas Detection Systems]

CHAPTER 2 DEFINITIONS

**SECTION 202 DEFINITIONS
202**

~~**[F] CONTINUOUS GAS DETECTION SYSTEM.** A gas detection system where the analytical instrument is maintained in continuous operation and sampling is performed without interruption. Analysis is allowed to be performed on a cyclical basis at intervals not to exceed 30 minutes.~~

[F] GAS DETECTION SYSTEM. *A system or portion of a combination system that utilizes one or more stationary sensors to detect the presence of a specified gas at a specified concentration and initiate one or more responses required by this code, such as notifying a responsible person, activating an alarm signal, or activating or deactivating equipment. A self-contained gas detection and alarm device is not classified as a gas detection system.*

[F] HPM. *See "Hazardous Production Material."*

[F] 406.8.5 Gas detection system. Repair garages used for the repair of vehicles fueled by nonodorized gases ~~such as, including but not limited to~~ hydrogen and nonodorized LNG, shall be provided with a flammable gas detection system that complies with Section 916. The gas

detection system shall be designed to detect leakage of nonodorized gaseous fuel. Where lubrication or chassis service pits are provided in garages used for repairing nonodorized LNG-fueled vehicles, gas sensors shall be provided in such pits.

[F] 406.8.5.2 406.8.5.1 Operation System activation. Activation of the a gas detection system alarm shall result in all of the following:

- ~~1. Initiation of distinct audible and visual alarm signals in the repair garage.~~
1. Initiation of local audible and visible alarms in approved locations.
2. Deactivation of all heating systems located in the repair garage.
3. Activation of the mechanical ventilation system, where the ventilation system is interlocked with gas detection.

[F] 406.8.5.3 406.8.5.2 Failure of the gas detection system. Failure of the ~~gas detection system~~ gas detection system shall result in the deactivation of automatically deactivate the heating system, ~~activation of~~ activate the mechanical ventilation system where the system is interlocked with the ~~gas detection system~~ gas detection system, and cause a trouble signal to sound in at an approved location.

[F] 406.8.5.1 System design. The flammable gas detection system shall be ~~listed or approved~~ and shall be calibrated to the types of fuels or gases used by vehicles to be repaired. The gas detection system shall be designed to activate when the level of flammable gas exceeds 25 percent of the lower flammable limit (LFL). Gas detection shall be provided in lubrication or chassis service pits of repair garages used for repairing nonodorized LNG-fueled vehicles.

~~**[F] 406.8.5.1.1 Gas detection system components.** Gas detection system control units shall be listed and labeled in accordance with UL 864 or UL 2017. Gas detectors shall be listed and labeled in accordance with UL 2075 for use with the gases and vapors being detected.~~

[F] 415.5.3 Supervision. Emergency alarm systems required by Section 415.5.1 or 415.5.2 shall be electrically supervised and monitored by an approved central, proprietary or remote station service or shall initiate an audible and visual signal at a constantly attended on-site location.

[F] 415.5.4 Emergency alarm systems. Emergency alarm systems required by Section 415.5.1 or 415.5.2 shall be provided with emergency or standby power in accordance with Section ~~2702~~ 2702.2.8 and 2702.2.14.

[F] 415.11.7 Continuous-gas Gas detection systems. A ~~continuous gas detection system~~ gas detection system complying with Section 916 shall be provided for HPM gases where the physiological warning threshold level of the gas is at a higher level than the accepted permissible exposure limit (PEL) for the gas and for flammable gases in accordance with Sections 415.11.7.1 and through 415.11.7.2.

[F] 415.11.7.1 Where required. A ~~continuous gas detection system~~ shall be provided in the areas identified in Sections 415.11.7.1.1 through 415.11.7.1.4.

[F] 415.11.7.1.1 Fabrication areas. A ~~continuous gas detection system~~ shall be provided in fabrication areas where HPM gas is used in the fabrication area.

[F] 415.11.7.1.2 HPM rooms. A ~~continuous~~ *gas detection system* shall be provided in HPM rooms where HPM gas is used in the room.

[F] 415.11.7.1.3 Gas cabinets, exhausted enclosures and gas rooms. A ~~continuous~~ *gas detection system* shall be provided in gas cabinets and exhausted enclosures for HPM gas. A ~~continuous~~ *gas detection system* shall be provided in gas rooms where HPM gases are not located in gas cabinets or exhausted enclosures.

[F] 415.11.7.1.4 Corridors. Where HPM gases are transported in piping placed within the space defined by the walls of a *corridor* and the floor or roof above the *corridor*, a ~~continuous~~ *gas detection system* shall be provided where piping is located and in the *corridor*.

Exception: A ~~continuous~~ *gas detection system* is not required for occasional transverse crossings of the *corridors* by supply piping that is enclosed in a ferrous pipe or tube for the width of the *corridor*.

[F] 415.11.7.2 Gas detection system operation. The ~~continuous~~ *gas detection system* shall be capable of monitoring the room, area or equipment in which the HPM gas is located at or below all the following gas concentrations:

1. Immediately dangerous to life and health (IDLH) values where the monitoring point is within an exhausted enclosure, ventilated enclosure or gas cabinet.
2. Permissible exposure limit (PEL) levels where the monitoring point is in an area outside an exhausted enclosure, ventilated enclosure or gas cabinet.
3. For flammable gases, the monitoring detection threshold level shall be vapor concentrations in excess of 25 percent of the lower flammable limit (LFL) where the monitoring is within or outside an exhausted enclosure, ventilated enclosure or gas cabinet.
4. Except as noted in this section, monitoring for highly toxic and toxic gases shall also comply with Chapter 60 of the *International Fire Code*.

[F] 415.11.9.3 Signals. The ~~emergency control station~~ emergency control station shall receive signals from emergency equipment and alarm and detection systems. Such emergency equipment and alarm and detection systems shall include, but not be limited to, the following where such equipment or systems are required to be provided either in this chapter or elsewhere in this code:

1. *Automatic sprinkler system* alarm and monitoring systems.
2. *Manual fire alarm* systems.
3. *Emergency alarm* systems.
4. ~~Continuous gas~~ Gas *detection systems*.
5. Smoke detection systems.
6. Emergency power system.
7. Automatic detection and alarm systems for pyrophoric liquids and Class 3 water-reactive liquids required in Section 2705.2.3.4 of the *International Fire Code*.
8. Exhaust *ventilation* flow alarm devices for pyrophoric liquids and Class 3 water-reactive liquids cabinet exhaust *ventilation* systems required in Section 2705.2.3.4 of the *International Fire Code*.

[F] 421.6 Gas detection system. Hydrogen fuel gas rooms shall be provided with an approved flammable gas detection system in accordance ~~with~~ a gas detection system that complies with Sections 916, and Sections 421.6.1 through 421.6.4 421.6.2.

[F] 421.6.3 421.6.1 Operation System activation. Activation of the a gas detection system alarm shall result in all both of the following:

1. Initiation of distinct audible and ~~visual~~ visible alarm signals both inside and outside of the hydrogen fuel gas room.
2. Activation Automatic activation of the mechanical exhaust ventilation system.

[F] 421.6.1 System design. ~~The flammable gas detection system shall be listed for use with hydrogen and any other flammable gases used in the hydrogen fuel gas room. The gas detection system shall be designed to activate when the level of flammable gas exceeds 25 percent of the lower flammability limit (LFL) for the gas or mixtures present at their anticipated temperature and pressure.~~

[F] 421.6.4 421.6.2 Failure of the gas detection system. Failure of the gas detection system gas detection system shall result in activation of automatically activate the mechanical exhaust ventilation system, ~~cessation of stop~~ hydrogen generation, ~~and the sounding of cause~~ a trouble signal in ~~to sound at~~ an approved location.

[F] 421.6.2 Gas detection system components. ~~Gas detection system control units shall be listed and labeled in accordance with UL 864 or UL 2017. Gas detectors shall be listed and labeled in accordance with UL 2075 for use with the gases and vapors being detected.~~

[F] 908.1 Group H occupancies. Emergency alarms for the detection and notification of an emergency condition in Group H occupancies shall be provided in accordance with Section 415.5.

[F] 908.2 Group H-5 occupancy. Emergency alarms for notification of an emergency condition in an HPM facility shall be provided as required in Section 415.11.3.5. ~~A continuous gas detection system shall be provided for HPM gases in accordance with Section 415.11.7.~~

[F] 908.3 Highly toxic and toxic materials. A gas detection system shall be provided to detect the presence of ~~highly toxic or toxic~~ gas at or below the permissible exposure limit (PEL) or ceiling limit of the gas for which detection is provided. The system shall be capable of monitoring the discharge from the treatment system at or below one-half the immediately dangerous to life and health (IDLH) limit.

Exception: ~~A gas detection system is not required for toxic gases when the physiological warning threshold level for the gas is at a level below the accepted PEL for the gas.~~

[F] 908.3.1 Alarms. ~~The gas detection system shall initiate a local alarm and transmit a signal to a constantly attended control station when a short-term hazard condition is detected. The alarm~~

~~shall be both visible and audible and shall provide warning both inside and outside the area where gas is detected. The audible alarm shall be distinct from all other alarms.~~

Exception: ~~Signal transmission to a constantly attended control station is not required when not more than one cylinder of *highly toxic* or *toxic* gas is stored.~~

[F] 908.3.2 Shutoff of gas supply. ~~The gas detection system shall automatically close the shutoff valve at the source on gas supply piping and tubing related to the system being monitored for whichever gas is detected.~~

Exception: ~~Automatic shutdown is not required for reactors utilized for the production of *highly toxic* or *toxic* compressed gases where such reactors are:~~

- ~~1. Operated at pressures less than 15 pounds per square inch gauge (psig) (103.4 kPa).~~
- ~~2. Constantly attended.~~
- ~~3. Provided with readily accessible emergency shutoff valves.~~

[F] 908.3.3 Valve closure. ~~The automatic closure of shutoff valves shall be in accordance with the following:~~

- ~~1. When the gas detection sampling point initiating the gas detection system alarm is within a gas cabinet or exhausted enclosure, the shutoff valve in the gas cabinet or exhausted enclosure for the specific gas detected shall automatically close.~~
- ~~2. Where the gas detection sampling point initiating the gas detection system alarm is within a gas room and compressed gas containers are not in gas cabinets or exhausted enclosures, the shutoff valves on all gas lines for the specific gas detected shall automatically close.~~
- ~~3. Where the gas detection sampling point initiating the gas detection system alarm is within a piping distribution manifold enclosure, the shutoff valve for the compressed container of specific gas detected supplying the manifold shall automatically close.~~

Exception: ~~When the gas detection sampling point initiating the gas detection system alarm is at a use location or within a gas valve enclosure of a branch line downstream of a piping distribution manifold, the shutoff valve in the gas valve enclosure for the branch line located in the piping distribution manifold enclosure shall automatically close.~~

[F] 908.4 Ozone gas-generator rooms. ~~Ozone gas-generator rooms shall be equipped with a continuous gas detection system that will shut off the generator and sound a local alarm when concentrations above the PEL occur.~~

[F] 908.5 Repair garages. ~~A flammable gas detection system shall be provided in repair garages for vehicles fueled by nonodorized gases in accordance with Section 406.8.5.~~

[F] 908.6 Refrigerant detector. ~~Machinery rooms shall contain a refrigerant detector with an audible and visual alarm. The detector, or a sampling tube that draws air to the detector, shall be located in an area where refrigerant from a leak will concentrate. The alarm shall be actuated at a value not greater than the corresponding TLV-TWA values for the refrigerant classification shown in the *International Mechanical Code* for the refrigerant classification. Detectors and~~

alarms shall be placed in approved locations. The detector shall transmit a signal to an approved location.

~~**[F] 908.7 Carbon dioxide (CO₂) systems.** Emergency alarm systems in accordance with Section 5307.5.2 of the *International Fire Code* shall be provided where required for compliance with Section 5307.5 of the *International Fire Code*.~~

SECTION 916— GAS DETECTION SYSTEMS

[F] 916.1 General. Gas detection systems required by this code shall comply with Sections 916.2 through 916.11.

[F] 916.2 Construction documents. Documentation of the gas detection system design and equipment to be used that is adequate to demonstrate compliance with the requirements of this code shall be provided with the application for permit.

[F] 916.3 Equipment. Gas detection system equipment shall be designed for use with the gases being detected and shall be installed in accordance with manufacturers' instructions.

[F] 916.4 Power connections. Gas detection systems shall be permanently connected to the building electrical power supply or shall be permitted to be cord connected to an unswitched receptacle using an approved restraining means that secures the plug to the receptacle.

[F] 916.5 Emergency and standby power. Where standby or emergency power is not required elsewhere by this code, standby or emergency power shall be provided or the gas detection system shall initiate a trouble signal at an approved location if the power supply is interrupted.

[F] 916.6 Sensor locations. Where a specific location for sensors is not specified elsewhere by this code, sensors shall be installed in approved locations where leaking gases are expected to accumulate.

[F] 916.7 Gas sampling. Gas sampling shall be performed continuously. Sample analysis shall be processed immediately after sampling, except as follows:

1. For HPM gases, sample analysis shall be performed at intervals not exceeding 30 minutes.
2. For toxic gases that are not HPM, sample analysis shall be performed at intervals not exceeding 5 minutes in accordance with Section 6004.2.2.7 of the *International Fire Code*.
3. Where a less frequent or delayed sampling interval is approved.

[F] 916.8 System activation. A gas detection alarm shall be initiated where any sensor detects a concentration of gas exceeding the following thresholds:

1. For flammable gases, a gas concentration exceeding 25 percent of the lower flammable limit (LFL).
2. For non-flammable gases, a gas concentration exceeding the threshold specified by the section of this code requiring a gas detection system.

Upon activation of a gas detection alarm, alarm signals or other required responses shall be as

specified by the section of this code or the International Fire Code requiring a gas detection system. Audible and visible alarm signals associated with a gas detection alarm shall be distinctive from fire alarm and carbon monoxide alarm signals.

[F] 916.9 Signage. Signs shall be provided adjacent to gas detection system alarm signaling devices that advise occupants of the nature of the signals and actions to take in response to the signal.

[F] 916.10 Fire alarm system connections. Gas sensors and gas detection systems shall not be connected to fire alarm systems unless approved and connected in accordance with the fire alarm equipment manufacturer's instructions.

[F] 916.11 Inspection, testing and sensor calibration. Gas detection systems and sensors shall be inspected, tested and calibrated in accordance with the International Fire Code.

[F] 2702.2.1 Emergency alarm systems. Emergency power shall be provided for emergency alarm systems as required by Section 415.5.

[F] 2702.2.6 Gas detection systems. Emergency or standby power shall be provided for gas detection systems in accordance with the International Fire Code.

~~**[F] 2702.2.1 Emergency alarm systems.** Emergency power shall be provided for emergency alarm systems as required by Section 415.5.~~

~~**[F] 2702.2.6 Gas detection systems.** Emergency or standby power shall be provided for gas detection systems in accordance with the International Fire Code.~~

[Item 36. Editorial Correction]

1029.3.1 Occupant loads 300 or less. Group A occupancies or assembly occupancies accessory to Group E occupancies that have an occupant load of 100 or more and 300 or less, shall have not less than one of the required means of egress directly to an exit, or through a lobby, that is not used to access the other required exit, or to an exit, or to a one-hour rated corridor to an exit, or continuous through a one-hour rated lobby to an exit. Not less than one exit shall discharge on a street or an unoccupied space of not less than 20 feet (6096 mm) in capacity that adjoins a street or public way.

[Item 37. ICC Errata Correction]

TABLE 602
FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS
BASED ON FIRE SEPARATION DISTANCE^{a,d,g}
[Table not shown]

a. Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.

- b. See Section 705.1.1 for party walls.
- c. Open parking garages complying with Section 406 shall not be required to have a fire-resistance rating.
- d. The fire-resistance rating of an exterior wall is determined based upon the fire separation distance of the exterior wall and the story in which the wall is located.
- e. For special requirements for Group H occupancies, see Section 415.3.
- f. For special requirements for Group S aircraft hangars, see Section 412.4.1.
- g. Where Table 705.8 permits nonbearing exterior walls with unlimited area of unprotected openings, the required fire-resistance rating for the exterior walls is 0 hours.
- h. For a building containing only a Group U occupancy private garage or carport, the exterior wall shall not be required to have a fire-resistance rating where the fire separation distance is 5 feet (1523) or greater.
- i. *Group R-3 and Group U occupancies when used as accessory to Group R-3 occupancies, shall not be required to have a fire-resistance rating where the fire separation distance is 5 feet or more; or when equipped throughout with an automatic residential fire sprinkler system installed in accordance with Section 903.3 the fire-resistance rating shall not be required where the fire separation distance is 3 feet or more.*

TABLE 705.8

**MAXIMUM AREA OF EXTRIOR WALL OPENINGS BAED ON FIRE SEPERATION DISTANCE AND
DEGREE OF OPENING PROTECTION**

[The table is not shown]

For SI:1 foot = 304.8 mm.

UP, NS =Unprotected openings in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. UP, S =Unprotected openings in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

P =Openings protected with an opening protective assembly in accordance with Section 705.8.2.

- a. Values indicated are the percentage of the area of the exterior wall, per story.
- b. For the requirements for fire walls of buildings with differing heights. see Section 706.6.1.
- c. For openings in a fire wall for buildings on the same lot. see Section 706.8.
- d. The maximum percentage of unprotected and protected openings shall be 25 percent for Group R-3 occupancies.
- e. Unprotected openings shall not be permitted for openings with a fire separation distance of less than 15 feet for Group H-2 and H-3 occupancies.
- f. The area of unprotected and protected openings shall not be limited for Group R-3 occupancies. with a fire separation distance of 5 feet or greater
- g. The area of openings in an open parking structure with a fire separation distance of i0 feet or greater shall not be limited
- h. Includes buildings accessory to Group R-3.
- i. Not applicable to Group H-1, H-2 and H-3 occupancies.
- j. The area of openings in a building containing only a Group U occupancy private garage or carport with a fire separation distance of 5 feet (1523) or grater shall not be limited.
- k. For openings between S-2 parking garage and Group R-2 building. see Section 705.3, Exception 2.